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#### **ABSTRACT**

Achieving a balance of resources, population and the environment is a major challenge. This booklet offers specific things that can be done to lessen individual environmental impact. Seven sections contain 150 one-paragraph suggestions that cover the topics of: (1) cleaning up the air pollution and combating ozone layer depletion; (2) preserving clean water; (3) reducing solid waste and toxic wastes; (4) stabilizing the population; (5) reducing the use of fossil fuels and combating global warming; (6) eating wisely for the world's good health; (7) becoming informed and educating others; and (8) working for a change: citizen action. (LZ)



# Making a Difference Compiled by: Zero Population Growth

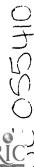
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## MAKING A DIFFERENCE

COMPILED BY ZERO POPULATION GROWTH 1400 16TH ST., NW, SUITE 320, WASHINGTON, DC (202) 332-2200



Achieving a balance of resources, population and the environment is a major challenge, but there are many ways each person can help to make it happen. Here are 150 specific things you can do "for Earth's sake." Some of these suggestions may not be appropriate for everyone, but each person is sure to find plenty of useful ideas here.

## Cleaning up the Air and Combating Ozone Layer Depletion

The chlorofluorocarbons (CFCs) used in air conditioners, refrigerators, fire extinguishers, and polystyrene foam products are eating away at the fragile ozone layer of the Earth's atmosphere. The ozone protects us from the sun's harmful rays. Without it, we may experience an increased rate of skin caser, global climate changes leading to water shortages and crop damage, and disruption of the marine food chain. We must reduce our use of CFC products and reduce the amount of toxic gases we put into the air to maintain a clean oxygen supply and a strong ozone layer.

- 1. Don't use leaded gas when your car is meant for unleaded. It pumps lead and nitrogen oxides into the atmosphere which contribute to smog, acid rain, and depletion of the ozone layer.
- Replace hoses in automobile air conditioners to prevent leaks. Make sure air conditioners are serviced or recharged at licensed service stations, preferably those stations that use refrigerant reclaiming systems. Otherwise, ask the station to drain the refrigerant into bottles to prevent it from evaporating.
- Stomp on or swat bugs instead of spraying, or, better yet, scoop them up and return them to their natural habitat outdoors.
- 4. Ask your service station to use CFC-recovery equipment when repairing or disposing of auto air conditioners.
- Avoid cigarette smoke, which contains toxic fumes.

- Check that your gas stove has adequate ventilation.
- 7. Repair smoky fireplaces so they draw efficiently.
- 8. Test your home for radon, especially if you live on the East Coast. Also test for formaldehyde gas found in products such as chipboard, plywood, insulation, carpet and upholstery.
- Encourage hospitals to stop using CFC sterilants.
- Plant trees and shrubs in your yard; they absorb carbon dioxide and make oxygen. If planted around the home, particularly on the west side, they can reduce cooling and heating costs.
- 11. Avoid buying wood from the tropical rainforests (e.g., teak, mahogany) unless you are sure that it was propagated by sustainable tree-farming methods. The rainforests absorb carbon dioxide and provide clean oxygen to help keep the climate steady and cool. They are also home for thousands of plant and animal species.
- 12. Fill your home, classroom, garden or window sill with plants to help absorb carbon dioxide and cleanse the oxygen supply.
- 13. Request your local government to set up a system for collecting and recycling the chlorofluorocarbons in old refrigerators and air conditioners.

## **Preserving Clean Water**

In the United States, over 40% of the groundwater (which serves as drinking water for over half the population) is contaminated by industrial and agricultural pollution, waste disposal into the ground, and chemical wastes from mining and petroleum production. After contamination, it is extremely difficult and costly to purify the groundwater. We are rapidly losing one of our most precious resources, but there are many ways we can help preserve our underground water supply.

14. Take showers instead of baths to reduce overall water consumption.

- 15. When showering, shaving, brushing teeth or hand-washing clothes, do not let water run when it is not being used.
- 16. Use ultra-low-flush or air-assisted toilets, which use 60-90% less water, or composting toilets, which use no water and recycle the organic waste.
- 17. Use water-efficient washing machines and dishwashers and run them only when full.
- 18. Be sure to fix leaky faucets immediately; promptly replace rubber washers on leaky valves. A little drip can lead to gallons of water wasted every day.
- 19. Purchase plain, white toilet paper and paper towels because the dyed brands pollute the water when disposed of.
- 20. Ask your car wash if they recycle their water. If they don't, washing your own car will use less. Be sure to shut off the hose when soaping the car.
- 21. Shave or use reusable hot wax for hair removal instead of using chemical depilatories which are flushed into the drinking water.
- 22. Use liquid laundry soaps instead of powders, as the former do not contain phosphates. Use chlorine bleach sparingly or switch to a non-chlorine bleach.
- 23. Many brands of toothpaste contain cadmium (which becomes harmful as large quantities of it are released into the groundwater) but manufacturers are not required by the FDA to list it among the active ingredients. Write to the maker of your brand and ask whether cadmium is present in your toothpaste. If so, express your concern to the manufacturer and switch brands, or use baking soda instead to clean your teeth.
- 24. Take used batteries directly to the appropriate disposal site, since the lead and sulfuric acid could otherwise leak into the ground.
- 25. Water your lawn only if the grass doesn't spring back when stepped on. Use a timer and efficient equipment and water only at night.
- 26. When you change your oil, do not pour it down the city sewer system. One quart of oil can contaminate up to two million gallons of drinking water. Contact your local sanitation or public works department to find out where your used oil can be recycled or safely disposed of.
- 27. Use "grey water" (i.e., previously used, like dishwater or pet's drinking water) or rain water for plants and garden, or use an underground drip irrigation system in the garden to send water directly to the roots without evaporation or wastage.
- 28. Install sink faucet aerators and water-efficient shower heads. These use 2-5 times less water and do not noticeably decrease performance.
- 29. Visit a nursery to learn about plants native to your environment or climate that require little or no watering.

- 30. Sweep your sidewalk, driveway or patio instead of hosing it down.
- 31. Use the correct amount of fertilizer, pesticide and herbicide to prevent pollution. Reduce runoff with good grass cover, shrubs and trees. Look for products that do not have a fossil fuel base.
- 32. Better yet, use compost instead of chemical fertilizers and centact your county's Cooperative Extension Service to find out about nonpolluting alternatives to chemical pesticides and herbicides.

## **Reducing Solid and Toxic Wastes**

The average person in the United States generates about 3.5 pounds of trash per day, which adds up to nearly one ton of trash per person every year. More than half of this waste can be economically recycled. Recycling means we use less landfill space and fewer natural resources such as fuel, water, forests and minerals.

- 33. Find out where the nearest recycling center or pick-up spot is for glass, aluminum, newspaper, office paper and cardboard. Also ask if they recycle plastic, batteries, motor oil or appliances. Start recycling goods in the home, at the office, in school; organize your own recycling center if necessary.
- 34. Buy products that are recycled, recyclable, refillable, reliable, repairable and/or reusable.
- 35. Ask for recycled paper at stationers and printers.
- 36. Recycle or reuse motor oil, tires and scrap metal.
- 37. Use mugs instead of paper cups or paper instead of styrofoam, rags instead of paper towels, cloth instead of paper napkins.
- 38. Convert items for other uses. Try out some of those "household hints" or come up with your own for those used boxes, coffee cans, magazines, etc.
- 39. Donate used clothing, books, appliances, etc. to local thrift shops or organizations.
- 40. Organize a book coop in your school or university to resell texts from the previous year to other students.
- 41. Buy used or antique furniture which you can refinish or reupholster.
- 42. Buy used or vintage clothing (you can find name brands and new garments in thrift shops, too), or liven up your older clothing with patches, dying, or alterations.
- 43. Don't just recycle the obvious candidates. You can recycle little cardboard gift boxes, tissue and laundry detergent boxes, glass jelly or mustard jars, ketchup bottles, or aluminum vegetable cans. Be creative and aware!
- 44. Carry a clean fork, knife, spoon and straw in your purse or briefcase so you won't pick up and throw

- away more plastic ones when you stop for a snack.
- Buy used appliances, televisions and stereos and repair them, if necessary; you'll probably save money, too.
- 46. Share and reuse supplies in the office. Pass memos and files around instead of making one for each staff member. Make double-sided photocopies.
- 47. Save margarine tubs, styrofoam trays, juice cans, toilet paper and paper towel rolls, etc. for children's arts and crafts or simple science projects at a nearby school or camp. Encourage teachers to reuse household supplies in the classroom as well.
- 48. When putting things into storage, gather free used boxes, jars, and other containers from a local supermarket, your neighbors and your friends instead of buying new supplies.
- Get heels and holes repaired on your shoes and give them a new polishing instead of buying a new pair.
- 50. Bring your own bags from home or ask for paper bags, not plastic, at the supermarket. Reuse the supermarket bags in your trash cans instead of buying specially-made plastic ones.
- 51. Make a compost pile in your backyard. Use old bits of food combined with soil as fertilizer for indoor and outdoor plants. Organize a neighborhood compost program.
- 52. Avoid buying items made from plastic because it does not biodegrade. For instance, the baskets, shelves, trash cans, file holders, pencil dispensers, etc. in your office can all be bought made out of metal or paper rather than plastic.
- 53. Buy products in bulk or with the least amount of packaging. It's usually more economical, too.
- 54. Avoid purchasing packages of disposable goods such as razors or pens. Get one quality item that will last you a long time, and try not to lose it!
- 55. Always choose paper, glass or metal over plastic packaging for all sorts of products: peanut butter, milk, eggs, ice cream, preserves, sauces, etc.
- Buy compact discs or cassette tapes instead of record albums. They last longer and use less vinyl.
- 57. Use cloth diapers on your baby and encourage others to do so as well. Plastic, disposable diapers are enormous contributors to the solid waste crisis since they do not biodegrade.
- 58. Express your disapproval of waste incinerators to local officials, the media, etc.
- 59. Buy only what you need and fully use what you buy.
- 60. Never, ever litter and don't let anyone around you get away with it either.

- 61. Buy products from companies that don't pollute or damage the environment.
- 62. Buy rechargeable batteries for flashlights, cassette recorders, etc. They cost a bit more but last much longer.
- 63. In your home, opt for hardwood floors or ceramic tile instead of wail-to-wall carpeting, or choose carpets made of all-natural fibers.
- 64. Try non-toxic alternatives to everyday household chemicals:
  - Instead of oven cleaner, use salt and baking soda.
  - Replace an ammonia-based cleaner with vinegar, salt and water (add baking soda for the bathroom).
  - Use half a lemon dipped in non-chlorine powder bleach as an abrasive cleanser.
  - One part lemon juice with two parts olive or vegetable oil serves as a floor or furniture polish.
  - Gradually add brewer's yeast to your pet's diet and eliminate flea collars and sprays.
  - 6) Kill roaches by leaving a mixture of sugar and baking soda in little piles wherever they are spotted.
- 65. If you must use chemical products in the home (this includes paints, insecticides, cleansers, disinfectants, etc.), be sure to take the unused portions to a household hazardous waste center. To find one near you, call your local sanitation or public works department.
- Set up a monthly neighborhood toxic chemical disposal effort and transport waste to the appropriate disposal site.
- 67. Avoid purchasing clothes that require dry cleaning, because the process uses toxic chlorinated solvents. Dry clean only when necessary.
- 68. Avoid synthetic fibers like polyester. These do not easily biodegrade and may produce hazardous gases when brought in contact with household chemicals.
- Contact your elected representatives to recommend mandatory household hazardous waste collection.
- Write or petition local companies to reduce their use and production of toxic chemicals and wastes.
- 71. Support legislative initiatives that encourage industry to modify manufacturing processes to eliminate the production of hazardous wastes and reduce, reuse and recycle what is produced.

## Stabilizing the Population

At the current race of growth, the world population—already at over 5 billion—is expected to double within



the next 39 years. The U.S. is the fastest growing industrialized country, and although it makes up only 5% of the world's population, it uses 25% of its resources. The Earth cannot sustain the environmental stress at this rate of growth. Therefore, we must change our population patterns to provide a healthy environment for future generations.

- 72. Becoming a parent involves many lifelong responsibilities. Take the time to discuss family size with your spouse and plan your family accordingly. Postpone having children until you have been married or in a stable relationship for at least three years. This makes sense for both family stability and population stability.
- 73. The surest way to avoid unwanted pregnancies is to abstain from sexual activity. When you are ready to become involved in an intimate relationship, consult your doctor, a clinic, or a school nurse about different types of contraceptives, their effectiveness, and the method best suited for you.
- 74. Promote sex education and population education in nearby schools.
- 75. Talk to teachers of life science, social studies, mathematics, home economics and family life courses about the possibility of teaching a unit on the population problem. Suggest books, articles and teaching kits you may have come across as supplementary materials.
- 76. Support and respect the decisions of relatives, friends and acquaintances who choose to have 0, 1 or 2 children or who choose to adopt. In our society, there is a great deal of pressure to have children, and those who opt for small families deserve support.
- 77. Arrange to have a speaker address your club or community group on the subject of population growth and its impacts on the environment, economy and society.
- Support contraceptive research and encourage friends and relatives to remain up-to-date on the latest methods of birth control.
- Consider adopting children in need of homes or becoming a foster parent rather than giving birth to (more) children.
- 80. Join Zero Population Growth and other organizations that work to ensure a healthier, more stable environment through curbing population growth.
- 81. Work with a daycare center, summer camp, school, big-brother/sister program or abused children's program to be around children on a regular basis and have an influence on their lives, instead of having (more) children of your own. You might also want to babysit, become a nanny, or "borrow" your friends' children for an evening or weekend; they'll be sure to appreciate the vacation.
- 82. Promote the inclusion of population issues whenever regional and global planning are discussed.

83. Urge legislators to support assistance for world and U.S. population programs and contraceptive research.

## Reducing the Use of Fossil Fuels and Combating Global Warming

Americans are currently very dependent on oil, coal and natural gas. These fuel sources are nonrenewable and burning them pumps toxic gases into our atmosphere. In addition to causing air and water pollution, burning fossil fuels also contributes to global warming. Reducing the use of fossil fuels will reduce the amount of carbon dioxide released into the atmosphere. However, alternatives to these resources that we have come to rely on so heavily are few, expensive, and sometimes—as in the case of nuclear energy—risky. Therefore, it is necessary to use energy as efficiently as possible, which can reduce household requirements from 25% to 90%.

### Conserving Energy in the Car:

- 84. Make sure that energy and environmental issues are covered in your school's driver education courses.
- 85. Carpool, ride a bicycle or use mass transit whenever possible. Walk for short trips!
- 86. Drive an energy-efficient car, use radial tires, obey the speed limit and have regular tune-ups and emission checks. Keep tires fully inflated and use high efficiency oil.
- 87. Engage in non-motorized sports and don't patronize sports such as auto racing, tractor pulls, etc.
- 88. Make sure you have very clear directions when traveling so you don't end up driving around the block—or the city— three or four times.
- 89. Change your buying habits—don't drive to the store for just a couple of items.

### Conserving Energy in the Home:

- 90. Save electricity by having a romantic dinner by candlelight or reading a book under a desk lamp instead of an overhead fixture. Open curtains and blinds in the room you are in to let in the daylight, and don't turn on overhead lights until the sun sets.
- 91. Learn about solar energy use in the home and support other efforts to tap into this natural and unlimited resource. You can build a solar hot water heater to supplement your hot water system or install solar panels on your roof to heat your home for almost no cost.
- 92. Use solar photovoltaic cells to run yard lights.
- 93. Wrap your hot water heater in a blanket and lower the temperature to 120 degrees. Use a booster converter for when you need it especially hot.
- 94. Use solar-powered calculators and rechargeable flashlights and batteries.

- 95. Make sure that lights, televisions, radios, etc. are OFF when not in use. Get a timer to turn lights on and off when away on vacation instead of leaving them on all the time.
- 96. In the winter, put on an extra sweater or some long underwear and turn the thermostat down a few degrees. In the summer, use fans instead of air conditioners whenever possible.
- 97. Replace incandescent light bulbs with compact fluorescent ones; they use less than one-quarter of the wattage and last ten times as long.
- 98. Use high-efficiency electrical appliances.
- 99. Make sure your home is very well insulated.
  Invest in storm windows or the new "super windows," weather stripping and ample caulking.
- 100. Turn off your heat, water heater and pilot lights when away on vacation.
- 101. Conduct an energy-efficiency survey of your home, school or office. You can get a low-cost home energy audit from your utility company. Implement an energy-efficiency program in your house.
- 102. Use a clothesline instead of a clothes dryer whenever possible. You can rig up a clothesline indoors for when the weather is poor.
- 103. Close off and do not cool or heat unused rooms. Use shades and curtains to insulate in both summer and winter.

## Eating Wisely for the World's Good Health

When we eat foods that are high on the food chain, such as meat and poultry, we are consuming excessive amounts of pesticides and natural resources. In the United States alone, animals raised for food consume enough grain to feed one billion people, about four times the country's population. Animal agriculture is also a prime contributor to topsoil loss, deforestation, water consumption and groundwater contamination through manure fertilizers. Raising livestock as a food source also uses 25 times as much fossil fuel as producing the same amount of protein in grain. By becoming conscientious about what we eat, Americans can help to make a difference in the world hunger problem and further protect our environment.

- 104. Eat lower on the food chain; that is to say, choose vegetables and grains over meats.
- 105. Avoid eating junk food that is processed with resources and energy that could be used to provide nutritious foods.
- 106. Speak to cafeteria personnel in your school or workplace about the advantages of serving foods that are low on the food chain and arranging energy efficient menus.
- 107. Prepare one meat-free meal a week for your family. You might even try to convert to vegetarianism all together.
- 108. Invite a speaker, perhaps a refugee, to your school, community center or civic group meeting

- to discuss the causes of nutrition and malnutrition in the U.S. as compared to some developing countries.
- 109. Begin a health food snack bar at your school or workplace.
- 110. Discuss with your family the trade-offs between convenience food menus and fresh food menus.
- 111. Support development of seed exchanges and home gardening with heirloom varieties of seeds to maintain genetic diversity.
- 112. Grow your own food garden instead of a lawn. You'll save the water and energy that goes into processing and shipment, and you'll be guaranteed pesticide-free produce.
- 113. Avoid buying highly processed goods.
- 114. Buy local produce and other goods. This cuts down on the energy used for packaging and transportation.
- 115. Join a local food coop or volunteer your time there.
- 116. Grow produce to give away to local soup kitchens or others who can use it.
- 117. Fast for a meal or two and donate the money you saved to a local food relief agency.

## **Becoming Informed and Educating Others**

Before we can do anything to help protect our environment, we must understand exactly what it is we are doing to harm it. Each person can help by becoming informed and teaching others about population and environmental problems and their solutions.

- 118. Learn and study about environmental and population issues to keep well informed and able to defend your position. Look in your local library for recent literature, check magazines, and contact organizations.
- 119. Hold a nutrition (population, ozone, recycling . . .) education day at your local school, university or church.
- 120. Invite a farmer or agriculture specialist to your school or community center to discuss the effects of different farming and irrigation methods and the effects of pesticide and fertilizer runo/f.
- 121. Write articles about the environment and population growth for your school or town newspaper or design a bulletin board or library display to help educate others.
- 122. Attend lectures and ask questions of the presenters and other local experts.
- 123. Offer polite reminders to friends, family and colleagues concerning conservation efforts.
- 124. Help teach friends to empathize with the citizens of developing nations. Increase their awareness of global ecological issues and teach basic economics for a more complete understanding. Combat myths like "exports are always good."

- 125. Be open to changing lifestyles as you become more aware of the impact each individual has on the whole society and the environment.
- 126. Educate students about environmentallyoriented jobs and volunteer opportunities.
- 127. Inform schools, hospitals, airlines and the media of your food concerns.

## Working for a Change: Citizen Action

One of the most effective ways of protecting your environment is to address the people who have a greater influence over its condition, such as politicians and corporate heads. These people feel compelled to respond to consumer and constituent demands, so citizens who express their views can have a tremendous impact.

Each of us has a chance to influence our government and the governments of other countries. Even when we cannot vote, we can write letters, join political groups, participate in their activities, and support candidates for office.

- 128. Find out where the candidates stand on environmental and population-related issues for elections at local, state and national levels. Vote for those candidates who you believe will have a positi effect on our environmental situation. Write the candidates who do not receive your vote to voice your concerns.
- 129. Patronize businesses that express an interest in environmental causes and activity; encourage them to donate a small percentage of their profits to good causes.
- 130. Demonstrate against major polluters and openspace destroyers by picketing, rallying, attending hearings or submitting testimony in writing.
- 131. Write to manufacturers and voice your concerns about excessive packaging and processing. Don't buy their products until you can rest assured that something is being done.
- 132. Write to your local environmental protection agency, coastal commission, department of parks and recreation or to the U.S. Department of the Interior and find out what they are doing to protect our wilderness, wildlife and open space. Demand that they do everything within their power to keep our environment safe and clean.
- 133. Write to your local newspapers expressing your greatest concerns about environmental and population issues and make suggestions as to how the readers can help make a difference.
- 134. Boycott products made by companies that pollute the environment or exploit poor nations. Write to them and voice your opinion.
- 135. Write to local stores, fast food restaurants, etc., asking that they stop using polystyrene foam products.
- 136. Investigate and support local effort? to preserve farmland. Write to a legislator or councilperson urging their support for the preservation of farmland.

- 137. Become active by speaking to groups or visiting policymakers to air your personal concerns or represent the views of your population or environmental organization. Talk to your local PTA about sponsoring a speaker from your organization.
- 138. Notify program directors of radio and television stations of newsworthy stories with environmental impact. Praise shows and news coverage that address problems of the environment and overpopulation, and express your disapproval towards those that do not.
- 139. Write to fast food chains expressing your concern about their throw-away practices and importation of beef from developing countries.
- 140. Write or talk to a state or national legislator on local and global food issues and U.S. aid or foreign policy.
- 141. Contact your city council and urge the necessity of citywide recycling.
- 142. Contact a legislator concerning use of pesticides on forests and farms.
- 143. Write a letter to overseas timber companies expressing concern for their erosion-control practices.
- 144. Write a letter to your representatives in Congress asking that pesticides banned in the U.S. not be exported overseas.
- 145. Promote better laws and law enforcement concerning all areas of the environment. Write letters to elected officials in all levels of government to insist that money be made available to enforce environmental laws. Ask that administrators in charge of law enforcement be instructed to carry out the laws which are there. Give specific suggestions to improve existing laws and/or for new ones.
- 146. Help to support local, national and international environmental organizations by donating money or goods or volunteering your time. They may appreciate your help staffing a booth at a local fair, participating in a walk, conducting workshops or helping to canvass for funds. Let them know when they're doing a good job.
- 147. Research to identify effective overseas development programs and organize school and community support.
- 148. Participate in demonstrations and rallies. Sign and distribute petitions. Organize letter-writing sessions. Your personal involvement makes a difference.
- 149. Organize a leafletting campaign in your neighborhood or city, or leaflet by yourself doorto-door, in shopping centers, etc.
- 150. Distribute posters for the organization with which you are involved or construct an exhibit to display in shopping centers, the lobbies of large buildings, schools, etc.